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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,153	03/23/2004	Satoshi Nakamura	Q80510	1955
23373	7590	10/20/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EKONG, EMEM	
			ART UNIT	PAPER NUMBER
			2688	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,153

Applicant(s)

NAKAMURA, SATOSHI

Examiner

EMEM EKONG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/23/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S Patent No. 6469689 B1 to James C. Dow (Dow et al.).

Dow et al. discloses a method of setting an indicatable direction of a preset direction indicator key (i.e. navigation button) in a portable radio terminal (i.e. portable, hand-held communication appliance), wherein: a valid direction showing a direction in which directional indication according to the following switched screen output by the direction indicator key is judged valid when the currently displayed screen is switched to another screen is set (see figures 1A, and 4-9, col. 2 line 60-col. 3 line 65, col. 6 line 46-col. 8 line 39, and col. 8 line 50 – col. 10 line 39).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-4, 8, 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 6925611 to John SanGiovanni (SanGiovanni) in view of Dow et al.

Regarding claim 1, SanGiovanni discloses a portable radio terminal, comprising: a direction indicator key (navigational interface to control a computing device) that outputs directional indication indicating one direction out of predetermined plural directions (col. 3 lines 15-52, col. 4 lines 1-15, col. 4 line 61-col. 5 line 28, and col. 6 lines 17-34).

However, SanGiovanni fails to specifically disclose a controller that validates or invalidates the directional indication output by the direction indicator key.

Dow et al. discloses a controller (processor) that validates or invalidates the directional indication output by the direction indicator key (col. 5 line 65-col.8 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of SanGiovanni, and have a controller that

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validates or invalidates the directional indication output by the direction indicator key the direction indicator key (navigational interface) of SanGiovanni with Dow et al. for the purpose of validating the entries made by user.

Regarding claim 2, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 1, further comprising: an operator console (i.e. input device, sensory pattern device) that outputs the specification of a valid direction specifying whether the directional indication is validated based upon a direction indicated by the directional indication or not (SanGiovanni, col. 5 lines 29-47, col. 5 line 65-col. 6 line 21 and col. 11 lines 55-60).

However, SanGiovanni fails to specifically disclose an operator console that outputs the specification of a valid direction specifying whether the directional indication is validated based upon a direction indicated by the directional indication or not, wherein: the controller validates or invalidates the directional indication according to the specification of the valid direction output by the operator console (SanGiovanni, col. 5 lines 29-31, col. 6 lines 16-34).

Dow et al. discloses an operator console that outputs the specification of a valid direction specifying whether the directional indication is validated based upon a direction indicated by the directional indication or not, wherein: the controller validates or invalidates the directional indication according to the specification of the valid direction output by the operator console (col. 5 line 65-col.8 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of SanGiovanni, and have a controller that validates or invalidates the directional indication output by the direction indicator key the direction indicator key (navigational interface) of SanGiovanni with Dow et al. for the purpose of validating the entries made by user.

Regarding claim 3, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 1, further comprising: a display that displays plural areas for displaying items showing the contents of operation and the contents of processing and displays the area corresponding to a currently selected item out of the plural areas as an active area based upon an instruction from the controller (SanGiovanni, see figure 2, col. 7 line 40-col. 8 line 14, col. 8 line 34-col. 9 line 5), wherein: the controller shifts the position of active display currently displayed on the display to a direction indicated by the directional indication when the directional indication is validated (SanGiovanni, col. 7 lines 43-46, col. 8 lines 4-14).

Regarding claim 4, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 1, wherein: the predetermined plural directions are at least four directions (SanGiovanni, see figures 1,2, and 9, col. 3 lines 15-52, col. 4 lines 1-15, col. 4 line 61-col. 5 line 28, and col. 6 lines 17-34).

Regarding claim 8, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 1, further comprising: a display that displays a figure of valid directions showing all directions in which the directional indication is valid (see figure 2, col. 7 line 40-col. 8 line 14, col. 8 line 34-col. 9 line 5, and col. 11 lines 24-30).

Regarding claim 12, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 8, however fails to specifically disclose wherein: the display displays a screen that is provided with plural areas for displaying items showing the contents of operation and the contents of processing and the figure of valid directions; and the controller instructs the display to display the figure of valid directions showing all directions indicated by the directional indication and validated on the following switched screen when the screen displayed on the display is switched to another screen.

Dow et al. discloses appliance and method of using same having a capability to graphically associate and disassociate data with and from one another. Dow et al. further disclose the portable radio terminal (i.e. hand-held image capture, communication appliance) wherein: the display displays a screen that is provided with plural areas for displaying items showing the contents of operation and the contents of processing and the figure of valid directions; and the controller instructs the display to display the figure of valid directions showing all directions indicated by the directional indication and validated on the following switched screen when the screen displayed on

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the display is switched to another screen (see figures 4, 5, 6, and 7, col. 8 line 47-col. 9 line 10, and col. 9 lines 33-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, wherein the display displays a screen that is provided with plural areas for displaying items showing the contents of operation and the contents of processing and the figure of valid directions; and the controller instructs the display to display the figure of valid directions showing all directions indicated by the directional indication and validated on the following switched screen when the screen displayed on the display is switched to another screen with the further teachings of Dow et al. for the purpose of using a screen display with different tool menu showing all directions indicated by the directional indication.

Regarding claim 13, SanGiovanni discloses a method of setting an indicatable direction of a preset direction indicator key in a portable radio terminal, comprising: a first step for specifying a direction in which directional indication output by the direction indicator key (col. 3 lines 15-52, col. 4 lines 1-15, col. 4 line 61-col. 5 line 31, and col. 6 lines 17-34).

However, SanGiovanni fails to disclose: a first step for specifying a direction in which directional indication output by the direction indicator key is validated; and a second step for setting the valid direction specified in the first step.

Dow et al. discloses a first step for specifying a direction in which directional indication output by the direction indicator key is validated; and a second step for setting the valid direction specified in the first step (col. 5 line 65-col.8 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of SanGiovanni, and a first step for specifying a direction in which directional indication output by the direction indicator key is validated; and a second step for setting the valid direction specified in the first step with Dow et al. for the purpose of validating the entries made by user.

Regarding claim 15, the combination of SanGiovanni and Dow et al. discloses the method according to claim 13, however fails to disclose further comprising: a step for displaying a figure designating all directions included in the currently set valid directions.

Dow et al. discloses a step for displaying a figure designating all directions included in the currently set valid directions (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, and comprising: a step for displaying a figure designating all directions included in the currently set valid directions with the further teachings of Dow et al. for the purpose of using a screen display with different tool menu showing a designated directions indicated by the directional indication.

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6. Claims 5-7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over SanGiovanni in view of Dow et al., and further in view of U.S patent No. 6810271 B1 to Todd Wood (Wood et al.).

Regarding claim 5, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 1, wherein: the direction indicator key (navigational interface) indicates one direction out of eight (SanGiovanni, col. 3 lines 15-52, col. 4 lines 1-15, col. 4 line 61-col. 5 line 28, and col. 6 lines 17-34),

the controller divides the eight directions into plural directional groups and validates or invalidates the directional indication collectively every directional group (SanGiovanni, col. 5 lines 29-31, col. 7 lines 43-46, and col. 8 lines 4-14), (Dow et al., col. 5 line 65-col.8 line 39).

However, SanGiovanni fails to disclose the direction indicator key indicates one direction out of eight longitudinal, lateral and diagonal directions.

Wood et al. discloses keypads for electrical device, and further discloses the direction indicator key indicates one direction out of eight longitudinal, lateral and diagonal directions (see figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, and the direction indicator key indicates one direction out of eight longitudinal, lateral and diagonal directions with teachings of Wood et al. for the purpose of using different shapes of direction indicator key.

Regarding claim 6, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 5, however fails to disclose wherein: the plural directional groups are two types of directional groups of four basic directions showing four longitudinal and lateral directions and four extended directions showing four diagonal directions.

Wood et al. discloses wherein: the plural directional groups are two types of directional groups of four basic directions showing four longitudinal and lateral directions and four extended directions showing four diagonal directions (see figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of SanGiovanni and Dow et al., and the plural directional groups are two types of directional groups of four basic directions showing four longitudinal and lateral directions and four extended directions showing four diagonal directions with Wood et al. for the purpose of using different shapes of direction indicator key.

Regarding claim 7, the combination of SanGiovanni, Dow et al. and Wood et al. discloses the portable radio terminal according to claim 5, further comprising: an operator console that outputs the specification of a valid direction specifying whether the directional indication is validated based upon a direction indicated by the directional indication collectively every directional group out of the plural directional groups or not (SanGiovanni, col. 5 lines 29-47, col. 5 line 65-col. 6 line 21 and col. 11 lines 55-60).

However, the combination fails to disclose wherein: the controller validates or invalidates the directional indication according to the specification of the valid direction output by the operator console.

Dow et al. discloses wherein: the controller validates or invalidates the directional indication according to the specification of the valid direction output by the operator console, (Dow et al., col. 5 line 65-col.8 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of SanGiovanni and Dow et al., and wherein: the controller validates or invalidates the directional indication according to the specification of the valid direction output by the operator console with further teachings of Dow et al. for the purpose of validating user entries.

Regarding claim 14, the combination of SanGiovanni, Dow et al., and Wood et al. discloses the method according to claim 13, however fails to disclose wherein: for the valid direction, there are two types of eight longitudinal, lateral and diagonal directions and four longitudinal and lateral directions.

Wood et al. discloses wherein: for the valid direction, there are two types of eight longitudinal, lateral and diagonal directions and four longitudinal and lateral directions (see figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, wherein for the valid direction, there are two types of eight longitudinal, lateral and diagonal directions and four longitudinal and

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lateral directions with the further teachings of Wood et al. for the purpose of using different patterns of direction indicator key.

7. Claims 9-11, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over SanGiovanni in view of Dow et al., and further in view of U.S Pub. No. 20040070567 A1 to Michael R. Longe (Longe et al.).

Regarding claims 9-11, the combination of SanGiovanni and Dow et al. discloses the portable radio terminal according to claim 8, wherein: the controller changes a part corresponding to a direction indicated by the directional indication in the figure of valid directions and instructs the display to display the changed figure when the directional indication is validated (reads on claim 9) (SanGiovanni, col. 7 line 40- col. 8 line 14).

However, the combination fails to disclose wherein: the controller changes the display color and display form of a part corresponding to a direction indicated by the directional indication in the figure of valid directions and instructs the display to display the changed figure when the directional indication is validated (claims 10 and 11).

Longe et al. discloses changing the display color and display form of a part corresponding to a direction indicated by the directional indication (reads on claims 10 and 11) (see figure 2 and par. 0048).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the portable radio terminal of the combination, wherein: the controller changes the display color and display form of a part corresponding to a direction indicated by the directional indication in the figure of valid directions and

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instructs the display to display the changed figure when the directional indication is validated with the teachings of Longe et al. for the purpose of using a screen display that changes the display color and the display form of a part corresponding to a direction indicated by the directional indication.

Regarding claims 16, and 17, the combination of SanGiovanni and Dow et al. discloses the method according to claim 15, however fails to disclose further comprising: a step for changing a part and the display color of a part corresponding to a direction indicated by the direction indicator key in the figure designating directions (claims 16 and 17).

Longe et al. discloses a step for changing a part and the display color corresponding to a direction indicated by the direction indicator key in the figure designating directions (reads on claims 16 and 17) (see figure 2 and par. 0048).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, and a step for changing a part and the display color of a part corresponding to a direction indicated by the direction indicator key in the figure designating directions with longe et al. for the purpose of using a screen display that changes a part and a display color corresponding to a direction indicated by the directional indication.

However, the combination of SanGiovanni, Dow et al. and longe et al. fails to disclose displaying the changed figure.

Dow et al. discloses displaying the changed figure (highlighted option) (see figures 4 and 9A, col. 8 line 50 – col. 10 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, and displaying the changed figure with the further teachings of Dow et al. for the purpose of displaying the changed figure.

Regarding claim 18, the combination of SanGiovanni and Dow et al. discloses the method according to claim 15, however fails to disclose further comprising: a step for changing the display form of a part corresponding to a direction indicated by the direction indicator key in the figure designating directions and displaying the changed figure.

Longe et al. discloses a step for changing the display form of a part corresponding to a direction indicated by the direction indicator key in the figure designating directions and displaying the changed figure (see figures 4 and 9A, col. 8 line 50 – col. 10 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, and a step for changing the display form of a part corresponding to a direction indicated by the direction indicator key in the figure designating directions and displaying the changed figure with the teachings of Longe et al. for the purpose of display form.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to the portable radio terminal comprising: a direction indicator key:

U.S. Pat. No. 6377685 B1 to Ravi C. Krishnan

U.S. Pat. No. 6925315 B2 to Fred Langford

U.S. Pat. No. 6771992 B1 to Masashi Tomura et al.

U.S. Pat. No. 6850226 B2 to Andrea Finke-Anlauff

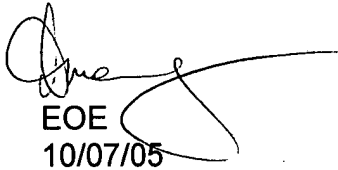
U.S. Pat. No. 6897849 B2 to Jae-Wook Kim.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH FEILD can be reached on 571 272 4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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PRIMARY EXAMINER